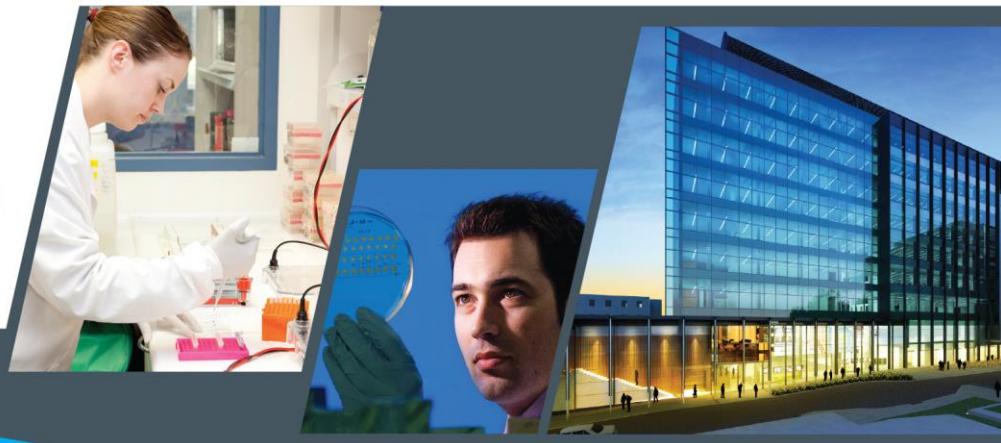
HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH



www.perkins.org.au

PERKINS
# Seminar Series
and
# Raine Visiting Professor Lecture Series

## THURSDAY 13 OCTOBER

### Dr Gijs van Soest

Erasmus University Medical Centre
Thorax Center Dept. of Biomedical Engineering, The Netherlands

### "Imaging of atherosclerosis with light and sound"

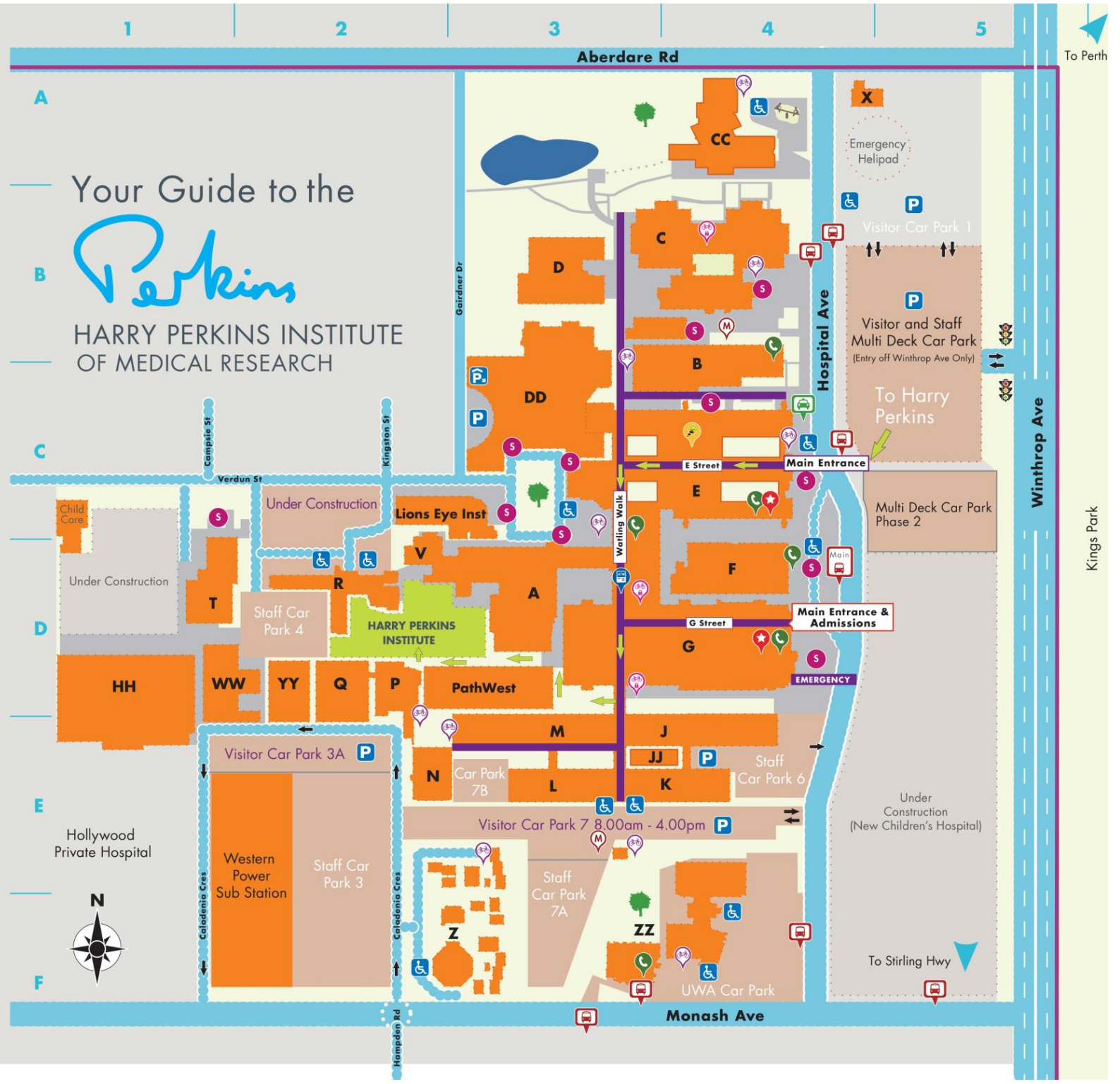
Dr Gijs van Soest is an Associate Professor in the Department of Biomedical Engineering of the Thorax Centre at the Erasmus University Medical Centre in Rotterdam, The Netherlands. He worked in a cardiology clinic as a translational researcher, working at the interface between clinical, basic science and engineering disciplines in Rotterdam from 2005. He obtained an MSc degree in Physics in 1997 at the University of Groningen. He was awarded his PhD from the University of Amsterdam in 2001.

Dr Van Soest currently leads the research effort in the Thorax Centre on the development and clinical translation of catheter-based imaging technologies. In his research, he bridges (cardiovascular) medicine, biomedical engineering and optical physics. His integrates a fundamental understanding of the physics and engineering principles of the optical, photoacoustic, and ultrasonic imaging with well-rounded insights in their clinical application. This has led to impressive technological achievements in catheter-based imaging that he and his team pushed from concept-phase through in vitro and in vivo tests, into clinical evaluation. He is an active member of the International Working Group on Intravascular OCT Standardization and Validation and frequently lectures at medical courses on cardiovascular imaging, as well as at engineering conferences on biomedical optics.

Atherosclerosis kills through rupture of lipid-containing plaques: contact between necrotic material and blood triggers clot formation, which may lead to distal embolization in the coronary vessels or the brain. Currently, there are no reliable prognostic biomarkers for these cardiovascular and cerebrovascular events. In this lecture, he will discuss how new imaging technology can identify unstable plaques before they rupture, and how imaging can guide interventions on plaques. Specifically, he will present recent work on Heartbeat OCT, a high speed optical method for acquiring microscopic resolution images of a complete vessel in less than a second, and will cover imaging of plaque composition by OCT and photoacoustics, a technique that combines light and sound.

12:00noon till 1:00pm
followed by a light lunch
For more information please contact Dr Amanda Cleaver on amanda.cleaver@rainefoundation.org.au
McCUSKER AUDITORIUM, HARRY PERKINS INSTITUTE OF MEDICAL RESEARCH, NORTH CAMPUS

RAINE
MEDICAL RESEARCH FOUNDATION


Your Guide to the
Perkins
HARRY PERKINS INSTITUTE
OF MEDICAL RESEARCH
1
2
3
4
5
A
B
C
D
E
F
Aberdare Rd
To Perth
Gairdner Dr
Hospital Ave
Winthrop Ave
Kings Park
Campsie St
Kingston St
Verdun St
Monash Ave
Hampden Rd
Caladenia Cres
Waiting Walk
CC
X
Emergency Helipad
Visitor Car Park 1
Visitor and Staff Multi Deck Car Park
(Entry off Winthrop Ave Only)
To Harry Perkins
Main Entrance
E Street
G Street
Main Entrance & Admissions
EMERGENCY
Main
Multi Deck Car Park Phase 2
C
D
DD
B
E
F
G
V
A
R
T
HH
WW
YY
Q
P
M
J
JJ
K
L
N
Z
ZZ
Child Care
Under Construction
Lions Eye Inst
HARRY PERKINS INSTITUTE
PathWest
Staff Car Park 4
Visitor Car Park 3A
Car Park 7B
Staff Car Park 6
Visitor Car Park 7 8.00am - 4.00pm
Staff Car Park 7A
Staff Car Park 3
Western Power Sub Station
Hollywood Private Hospital
Under Construction (New Children's Hospital)
UWA Car Park
To Stirling Hwy
N